District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: BP America Production Co.	OGRID: 778
Contact Name: Steve Moskal	Contact Telephone: (505) 330-9179
Contact email: steven.moskal@bpx.com	Incident # *(assigned by OCD)*
Contact mailing address: 380 Airport Road, Durango CO, 81303	NVF1731752853

Location of Release Source

Latitude: 36.84784 Longitude: -107.60995
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Northeast Blanco Unit 037	Site Type: Natural Gas Production Well Pad
Date Release Discovered: November 8, 2017	API#: 30-045-13344

Unit Letter	Section	Township	Range	County
B	06	30N	07W	San Juan

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☒ Crude Oil	Volume Released (bbls) unknown	Volume Recovered (bbls): 0 bbls
☐ Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls): unknown	Volume Recovered (bbls): 0 bbls
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:
Historical impacts, possible former earthen pit.

NMOCD
OCT 04 2018
DISTRICT III

56

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☐ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☐ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Steve Moskal Title: Environmental Coordinator

Signature: Date: October 3, 2018

email: steven.moskal@bpx.com Telephone: (505) 330-9179

OCD Only

Received by: Vanessa Fields Date: 10/12/2018

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Vanessa Fields Date: 10/12/2018

Printed Name: Title: Environmental Specialist

BP America

Northeast Blanco Unit 037 - API: 30-045-13344
(B) Sec 6 – T30N – R7W, San Juan County, New Mexico

Summary Record of Impact Remediation

November 7, 2017

1. Confirmation sampling conducted of a 95 barrel below grade tank (**BGT**). 5 point composite sample (**5pcs**) collected directly beneath BGT at 4 feet (**ft.**) below grade (**b.g.**). In addition, two (2) grab samples were collected at 4 and 8 ft. b.g. where staining was observed within the BGT footprint.

2. New Mexico Oil Conservation Division (**NMOCD**) Spill & Release Guidelines site closure standard interpreted at 1,000 mg/kg TPH based on:

Distance to groundwater: > 100 ft. (bgt permit hydrogeological report)
Distance to nearest water source: > 1,000 ft.
Distance to surface water (Navajo Reservoir): > 200 ft. & < 1,000 ft.

3. Federal mineral & surface lease.

November 9, 2017 Laboratory results received from BGT sampling. Test results listed below.

BGT Confirmation & Initial Delineation Sampling Laboratory Analytical Results

Sample ID (composites)	Field OVM (ppm)	TPH (GRO+DRO+MRO) (mg/Kg)	Total BTEX (mg/Kg)	Benzene (mg/Kg)	Chloride (mg/Kg)
5PC-TB @ 4' (95)	2.3	1,350	ND	ND	ND
1@ 4' (95)	2.7	3,820	ND	ND	ND
1@ 8' (95)	392	21,340	ND	ND	ND

OVM – Organic Vapor Meter, ppm – parts per million, GRO – Gasoline Range Organics, DRO – Diesel Range Organics, mg/Kg – milligram per kilogram.

April 4, 2018 Initiate remediation via soil excavation and on-site shredding.

April 5, 2018 Complete excavation of impacted media and conduct closure sampling. Final excavation 45'x45'x19' deep. Begin soil shredding.

April 9, 2018 Received 04/05/2018 closure samples final laboratory report. Results listed below.

Excavation Closure Sample Laboratory Analytical Results

Sample ID	Field OVM (ppm)	TPH (GRO+DRO+MRO) (mg/Kg)	Total BTEX (mg/Kg)	Benzene (mg/Kg)	Chloride (mg/Kg)
Base 5-pt. @ 19'	850	79	0.14	ND	ND
North Wall 5-pt. (8'16')	560	228	1.8	ND	ND
East Wall 5-pt. (8'16')	95	7.6	ND	ND	ND
South Wall 5-pt. (8'16')	279	44	ND	ND	ND
West Wall 5-pt. (8'16')	3,062	1,000	18.99	ND	ND

OVM – Organic Vapor Meter, ppm – parts per million, GRO – Gasoline Range Organics, DRO – Diesel Range Organics, mg/Kg – milligram per kilogram.

April 9, 2018 Conduct treated pile sampling (5 each x 100 cubic yard piles).

April 11, 2018 Receive 04/05/2018 treated pile final laboratory reports. Results listed below.

Treated Soil Pile Laboratory Analytical Results

Treated Pile ID (5-pt Comps)	Field OVM (ppm)	TPH (GRO+DRO+MRO) (mg/Kg)	Total BTEX (mg/Kg)	Benzene (mg/Kg)	Chloride (mg/Kg)
TSP-1	15.2	231.1	ND	ND	ND
TSP-2	23.1	144.7	ND	ND	ND
TSP-3	32.6	137.3	ND	ND	ND
TSP-4	57.4	143.8	ND	ND	ND

OVM – Organic Vapor Meter, ppm – parts per million, GRO – Gasoline Range Organics, DRO – Diesel Range Organics, mg/Kg – milligram per kilogram.

April 11, 2018 Conduct treated pile sampling (5 each x 100 cubic yard piles).

April 12, 2018 Receive 04/11/2018 treated pile preliminary laboratory reports. Treated Pile #5 (TSP-5) exceeded (1,096.6 mg/Kg) the site's TPH closure standard of 1,000 mg/Kg. BP requested a variance to use the treated soils as backfill with no further action. NMOCD approved BP's request for an alternative closure standard and, in addition, apply specified conditions noted during the backfill operation (see attached email correspondence).

April 13, 2018 Receive 04/11/2018 treated pile final laboratory reports. Results listed below.

Treated Soil Pile Laboratory Analytical Results

Treated Pile ID (5-pt Comps)	Field OVM (ppm)	TPH (GRO+DRO+MRO) (mg/Kg)	Total BTEX (mg/Kg)	Benzene (mg/Kg)	Chloride (mg/Kg)
TSP-5	92	1,096.6	ND	ND	ND
TSP-6	93	540	ND	ND	ND
TSP-7	59	450	ND	ND	ND
TSP-8	58	350	ND	ND	ND
TSP-9	60	340	ND	ND	ND

OVM – Organic Vapor Meter, ppm – parts per million, GRO – Gasoline Range Organics, DRO – Diesel Range Organics, mg/Kg – milligram per kilogram.

April 20, 2018 Completed excavation backfilling.

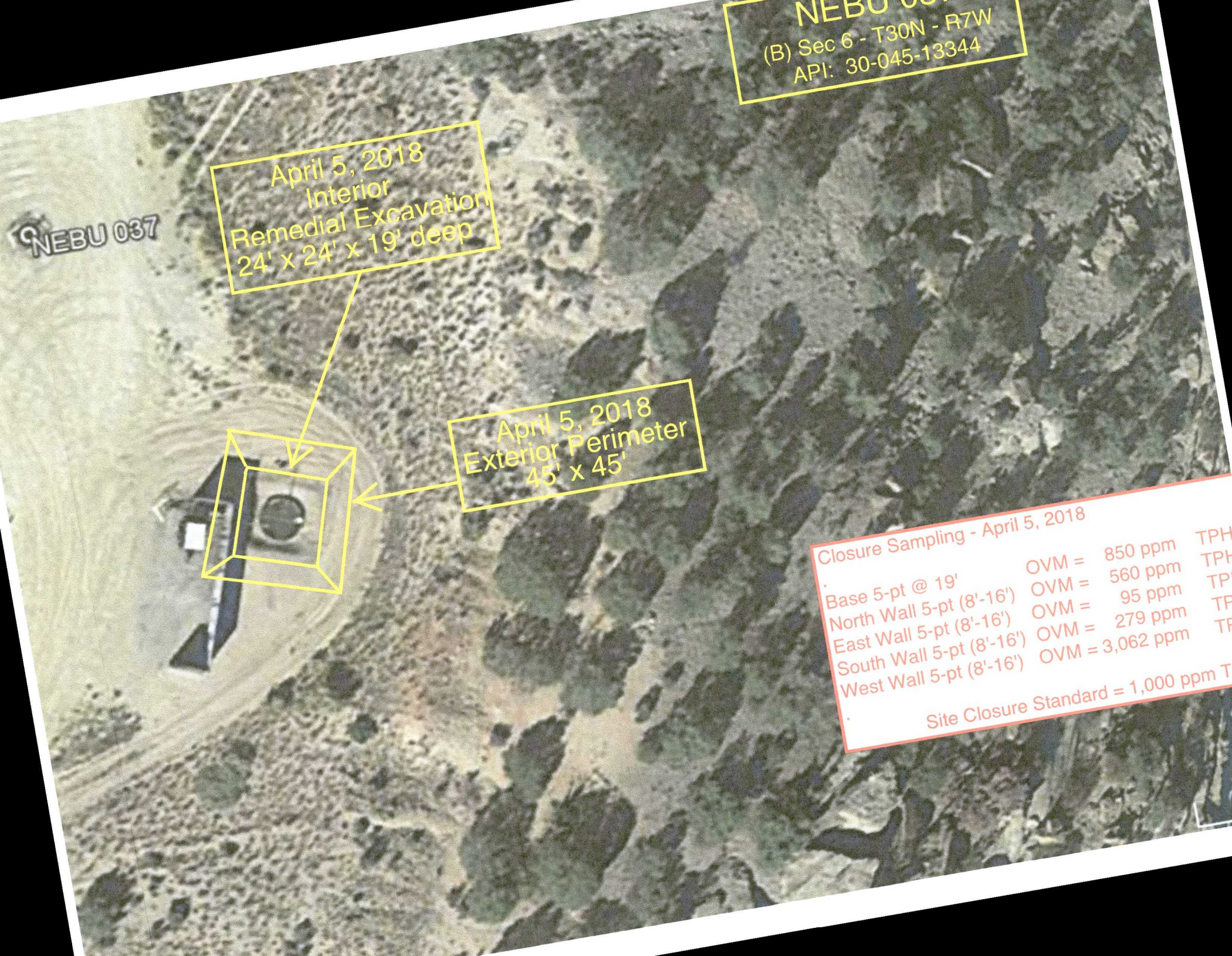
August 2, 2018 Conducted treated pile stacking area vadose zone sampling (2 each 5-point composites).

August 15, 2018 Receive final laboratory analytical test reports from vadose zone sampling. Results listed below.

Treated Pile Stacking Area Vadose Zone Laboratory Analytical Results

Vadose Zone ID (5-pt Comps)	Field OVM (ppm)	TPH (GRO+DRO+MRO) (mg/Kg)	Total BTEX (mg/Kg)	Benzene (mg/Kg)	Chloride (mg/Kg)
TSP BG-1(North)	0.0	62	ND	ND	ND
TSP BG-2(South)	0.0	78	ND	ND	ND

OVM – Organic Vapor Meter, ppm – parts per million, GRO – Gasoline Range Organics, DRO – Diesel Range Organics, mg/Kg – milligram per kilogram.


NEBU 037
(B) Sec 6 - T30N - R7W
API: 30-045-13344
April 5, 2018
Interior
Remedial Excavation
24' x 24' x 19' deep
April 5, 2018
Exterior Perimeter
45' x 45'
Closure Sampling - April 5, 2018
Base 5-pt @ 19' OVM = 850 ppm TPH
North Wall 5-pt (8'-16') OVM = 560 ppm TPH
East Wall 5-pt (8'-16') OVM = 95 ppm TP
South Wall 5-pt (8'-16') OVM = 279 ppm TP
West Wall 5-pt (8'-16') OVM = 3,062 ppm TP
Site Closure Standard = 1,000 ppm T

NEBU 037
(B) Sec 6, T30N, R7W
API : 30-045-133444

Subject: NEBU 037 sampling treated soil results 4-12-18

From: Steven.Moskal@bp.com
To: cory.smith@state.nm.us; vanessa.fields@state.nm.us; aadeloye@blm.gov; l1thomas@blm.gov
Cc: Vance.Hixon@bp.com; jeffcblagg@aol.com; jody.gonzales@bp.com; Erin.Garifalos@bp.com; blagg_njv@yahoo.com; dustindmace@gmail.com
Date: Thursday, April 12, 2018, 3:37:59 PM MDT

All,

Treated Pile #5 failed at 1,096.6 ppm, primarily 700 ppm MRO, which is not readily mobilized in soil and will pose no significant threat the the environment or public health. BP request a variance for closure using this material as backfill with no further action. The other 4 piles tested at below 1,000 ppm. This totals 900 cubic yards of soil for the project and completes soil shredding and excavation at the location.

If a variance is not granted, BP will plan to resample the stockpile tomorrow, 4/13, at 9:00 AM or if another time is preferred by either the BLM or OCD.

Please let me know.

Thanks,

Steve Moskal
Environmental Coordinator -BP- SJS
(505) 330-9179
Sent from my mobile device

NEBU-037.pdf
27.3kB

Subject: Re: NEBU 037 sampling treated soil results 4-12-18

From: Steven.Moskal@bp.com
To: Cory.Smith@state.nm.us
Cc: Vanessa.Fields@state.nm.us; aadeloye@blm.gov; l1thomas@blm.gov; Vance.Hixon@bp.com; jeffcblagg@aol.com; jody.gonzales@bp.com; Erin.Garifalos@bp.com; blagg_njv@yahoo.com; dustindmace@gmail.com
Date: Thursday, April 12, 2018, 4:32:37 PM MDT

Thank you Cory. The BLM has agreed with this and we will proceed with mixing the stockpiles and backfilling.

Steve Moskal
Environmental Coordinator -BP- SJS
(505) 330-9179
Sent from my mobile device

On Apr 12, 2018, at 3:53 PM, Smith, Cory, EMNRD <Cory.Smith@state.nm.us> wrote:

Steve,

OCD approves BP request for alternative closure standards on TSP #5, please ensure that TSP #5 is mixed TSP-9 and used as backfill in the deepest remaining portion of the excavation.

Please include this approval in your final C-141.

OCD approval for alternative closure does not relieve BP of any other requirements imposed by other regulatory agencies.

Cory Smith

Environmental Specialist

Oil Conservation Division

Energy, Minerals, & Natural Resources

1000 Rio Brazos, Aztec, NM 87410

(505)334-6178 ext 115

cory.smith@state.nm.us

LABORATORY

RESULTS

Analytical Report
Lab Order **1804338**
Date Reported: **4/9/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804338-001 **Matrix:** SOIL

Client Sample ID: BASE 5-pt @ 19'
Collection Date: 4/5/2018 11:00:00 AM
Received Date: 4/6/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/6/2018 11:50:53 AM	37461
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	38	3.6		mg/Kg	1	4/6/2018 2:05:32 PM	37449
Surr: BFB	117	70-130		%Rec	1	4/6/2018 2:05:32 PM	37449
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	41	9.4		mg/Kg	1	4/6/2018 11:49:14 AM	37459
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/6/2018 11:49:14 AM	37459
Surr: DNOP	105	70-130		%Rec	1	4/6/2018 11:49:14 AM	37459
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.018		mg/Kg	1	4/6/2018 2:05:32 PM	37449
Toluene	ND	0.036		mg/Kg	1	4/6/2018 2:05:32 PM	37449
Ethylbenzene	ND	0.036		mg/Kg	1	4/6/2018 2:05:32 PM	37449
Xylenes, Total	0.14	0.073		mg/Kg	1	4/6/2018 2:05:32 PM	37449
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	4/6/2018 2:05:32 PM	37449
Surr: Toluene-d8	75.9	70-130		%Rec	1	4/6/2018 2:05:32 PM	37449

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804338-002 **Matrix:** SOIL

Client Sample ID: NORTH WALL 5-pt (8'-16')
Collection Date: 4/5/2018 11:07:00 AM
Received Date: 4/6/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/6/2018 12:03:17 PM	37461
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	170	33		mg/Kg	10	4/6/2018 10:37:15 AM	37449
Surr: BFB	106	70-130		%Rec	10	4/6/2018 10:37:15 AM	37449
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	58	9.3		mg/Kg	1	4/6/2018 12:11:34 PM	37459
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/6/2018 12:11:34 PM	37459
Surr: DNOP	106	70-130		%Rec	1	4/6/2018 12:11:34 PM	37459
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.17		mg/Kg	10	4/6/2018 10:37:15 AM	37449
Toluene	ND	0.33		mg/Kg	10	4/6/2018 10:37:15 AM	37449
Ethylbenzene	ND	0.33		mg/Kg	10	4/6/2018 10:37:15 AM	37449
Xylenes, Total	1.8	0.67		mg/Kg	10	4/6/2018 10:37:15 AM	37449
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	10	4/6/2018 10:37:15 AM	37449
Surr: Toluene-d8	92.5	70-130		%Rec	10	4/6/2018 10:37:15 AM	37449

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804338-003 **Matrix:** SOIL

Client Sample ID: EAST WALL 5-pt (8'-16')
Collection Date: 4/5/2018 11:13:00 AM
Received Date: 4/6/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/6/2018 12:15:42 PM	37461
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	7.6	3.6		mg/Kg	1	4/6/2018 11:46:43 AM	37449
Surr: BFB	115	70-130		%Rec	1	4/6/2018 11:46:43 AM	37449
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/6/2018 12:33:38 PM	37459
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/6/2018 12:33:38 PM	37459
Surr: DNOP	98.2	70-130		%Rec	1	4/6/2018 12:33:38 PM	37459
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.018		mg/Kg	1	4/6/2018 11:46:43 AM	37449
Toluene	ND	0.036		mg/Kg	1	4/6/2018 11:46:43 AM	37449
Ethylbenzene	ND	0.036		mg/Kg	1	4/6/2018 11:46:43 AM	37449
Xylenes, Total	ND	0.072		mg/Kg	1	4/6/2018 11:46:43 AM	37449
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	4/6/2018 11:46:43 AM	37449
Surr: Toluene-d8	89.1	70-130		%Rec	1	4/6/2018 11:46:43 AM	37449

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804338-004 **Matrix:** SOIL

Client Sample ID: SOUTH WALL 5-pt (8'-16')
Collection Date: 4/5/2018 11:19:00 AM
Received Date: 4/6/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/6/2018 12:28:07 PM	37461
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	32	19		mg/Kg	5	4/6/2018 11:23:36 AM	37449
Surr: BFB	111	70-130		%Rec	5	4/6/2018 11:23:36 AM	37449
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	12	9.2		mg/Kg	1	4/6/2018 12:55:37 PM	37459
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/6/2018 12:55:37 PM	37459
Surr: DNOP	96.1	70-130		%Rec	1	4/6/2018 12:55:37 PM	37459
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.096		mg/Kg	5	4/6/2018 11:23:36 AM	37449
Toluene	ND	0.19		mg/Kg	5	4/6/2018 11:23:36 AM	37449
Ethylbenzene	ND	0.19		mg/Kg	5	4/6/2018 11:23:36 AM	37449
Xylenes, Total	ND	0.38		mg/Kg	5	4/6/2018 11:23:36 AM	37449
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	5	4/6/2018 11:23:36 AM	37449
Surr: Toluene-d8	89.2	70-130		%Rec	5	4/6/2018 11:23:36 AM	37449

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804338-005 **Matrix:** SOIL

Client Sample ID: WEST WALL 5-pt (8'-16')
Collection Date: 4/5/2018 11:25:00 AM
Received Date: 4/6/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/6/2018 12:40:31 PM	37461
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	710	82		mg/Kg	20	4/6/2018 11:00:25 AM	37449
Surr: BFB	102	70-130		%Rec	20	4/6/2018 11:00:25 AM	37449
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	290	9.9		mg/Kg	1	4/6/2018 1:17:29 PM	37459
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/6/2018 1:17:29 PM	37459
Surr: DNOP	101	70-130		%Rec	1	4/6/2018 1:17:29 PM	37459
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.41		mg/Kg	20	4/6/2018 11:00:25 AM	37449
Toluene	ND	0.82		mg/Kg	20	4/6/2018 11:00:25 AM	37449
Ethylbenzene	0.99	0.82		mg/Kg	20	4/6/2018 11:00:25 AM	37449
Xylenes, Total	18	1.6		mg/Kg	20	4/6/2018 11:00:25 AM	37449
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	20	4/6/2018 11:00:25 AM	37449
Surr: Toluene-d8	91.8	70-130		%Rec	20	4/6/2018 11:00:25 AM	37449

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804464-001 **Matrix:** SOIL

Client Sample ID: TSP-1
Collection Date: 4/9/2018 9:55:00 AM
Received Date: 4/10/2018 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/10/2018 11:25:12 AM	37510
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	76	9.6		mg/Kg	1	4/10/2018 10:26:03 AM	37505
Motor Oil Range Organics (MRO)	150	48		mg/Kg	1	4/10/2018 10:26:03 AM	37505
Surr: DNOP	100	70-130		%Rec	1	4/10/2018 10:26:03 AM	37505
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	5.1	4.6		mg/Kg	1	4/10/2018 9:45:10 AM	G50436
Surr: BFB	131	15-316		%Rec	1	4/10/2018 9:45:10 AM	G50436
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	4/10/2018 9:45:10 AM	B50436
Toluene	ND	0.046		mg/Kg	1	4/10/2018 9:45:10 AM	B50436
Ethylbenzene	ND	0.046		mg/Kg	1	4/10/2018 9:45:10 AM	B50436
Xylenes, Total	ND	0.092		mg/Kg	1	4/10/2018 9:45:10 AM	B50436
Surr: 4-Bromofluorobenzene	86.5	80-120		%Rec	1	4/10/2018 9:45:10 AM	B50436

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804464-002 **Matrix:** SOIL

Client Sample ID: TSP-2
Collection Date: 4/9/2018 9:59:00 AM
Received Date: 4/10/2018 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/10/2018 11:37:36 AM	37510
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	48	9.7		mg/Kg	1	4/10/2018 10:50:35 AM	37505
Motor Oil Range Organics (MRO)	92	48		mg/Kg	1	4/10/2018 10:50:35 AM	37505
Surr: DNOP	96.0	70-130		%Rec	1	4/10/2018 10:50:35 AM	37505
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	4.7	4.2		mg/Kg	1	4/10/2018 10:08:39 AM	G50436
Surr: BFB	128	15-316		%Rec	1	4/10/2018 10:08:39 AM	G50436
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.021		mg/Kg	1	4/10/2018 10:08:39 AM	B50436
Toluene	ND	0.042		mg/Kg	1	4/10/2018 10:08:39 AM	B50436
Ethylbenzene	ND	0.042		mg/Kg	1	4/10/2018 10:08:39 AM	B50436
Xylenes, Total	ND	0.083		mg/Kg	1	4/10/2018 10:08:39 AM	B50436
Surr: 4-Bromofluorobenzene	87.2	80-120		%Rec	1	4/10/2018 10:08:39 AM	B50436

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804464-003 **Matrix:** SOIL

Client Sample ID: TSP-3
Collection Date: 4/9/2018 10:04:00 AM
Received Date: 4/10/2018 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/10/2018 11:50:01 AM	37510
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	51	9.3		mg/Kg	1	4/10/2018 11:14:56 AM	37505
Motor Oil Range Organics (MRO)	81	46		mg/Kg	1	4/10/2018 11:14:56 AM	37505
Surr: DNOP	98.7	70-130		%Rec	1	4/10/2018 11:14:56 AM	37505
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	5.3	3.8		mg/Kg	1	4/10/2018 10:32:12 AM	G50436
Surr: BFB	150	15-316		%Rec	1	4/10/2018 10:32:12 AM	G50436
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	4/10/2018 10:32:12 AM	B50436
Toluene	ND	0.038		mg/Kg	1	4/10/2018 10:32:12 AM	B50436
Ethylbenzene	ND	0.038		mg/Kg	1	4/10/2018 10:32:12 AM	B50436
Xylenes, Total	ND	0.076		mg/Kg	1	4/10/2018 10:32:12 AM	B50436
Surr: 4-Bromofluorobenzene	92.8	80-120		%Rec	1	4/10/2018 10:32:12 AM	B50436

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804464-004 **Matrix:** SOIL

Client Sample ID: TSP-4
Collection Date: 4/9/2018 10:08:00 AM
Received Date: 4/10/2018 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/10/2018 12:02:26 PM	37510
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	56	10		mg/Kg	1	4/10/2018 11:39:32 AM	37505
Motor Oil Range Organics (MRO)	84	50		mg/Kg	1	4/10/2018 11:39:32 AM	37505
Surr: DNOP	93.5	70-130		%Rec	1	4/10/2018 11:39:32 AM	37505
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	3.8	3.3		mg/Kg	1	4/10/2018 10:55:42 AM	G50436
Surr: BFB	142	15-316		%Rec	1	4/10/2018 10:55:42 AM	G50436
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	4/10/2018 10:55:42 AM	B50436
Toluene	ND	0.033		mg/Kg	1	4/10/2018 10:55:42 AM	B50436
Ethylbenzene	ND	0.033		mg/Kg	1	4/10/2018 10:55:42 AM	B50436
Xylenes, Total	ND	0.066		mg/Kg	1	4/10/2018 10:55:42 AM	B50436
Surr: 4-Bromofluorobenzene	89.6	80-120		%Rec	1	4/10/2018 10:55:42 AM	B50436

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1804628**
Date Reported: **4/13/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804628-001 **Matrix:** SOIL

Client Sample ID: TSP-5
Collection Date: 4/11/2018 11:53:00 AM
Received Date: 4/12/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/12/2018 10:51:22 AM	37569
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	390	9.5		mg/Kg	1	4/12/2018 10:46:38 AM	37568
Motor Oil Range Organics (MRO)	700	47		mg/Kg	1	4/12/2018 10:46:38 AM	37568
Surr: DNOP	134	70-130	S	%Rec	1	4/12/2018 10:46:38 AM	37568
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	6.6	4.6		mg/Kg	1	4/12/2018 9:53:50 AM	37562
Surr: BFB	135	15-316		%Rec	1	4/12/2018 9:53:50 AM	37562
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	4/12/2018 9:53:50 AM	37562
Toluene	ND	0.046		mg/Kg	1	4/12/2018 9:53:50 AM	37562
Ethylbenzene	ND	0.046		mg/Kg	1	4/12/2018 9:53:50 AM	37562
Xylenes, Total	ND	0.092		mg/Kg	1	4/12/2018 9:53:50 AM	37562
Surr: 4-Bromofluorobenzene	86.9	80-120		%Rec	1	4/12/2018 9:53:50 AM	37562

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804628-002 **Matrix:** SOIL

Client Sample ID: TSP-6
Collection Date: 4/11/2018 11:58:00 AM
Received Date: 4/12/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/12/2018 11:03:46 AM	37569
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	190	9.7		mg/Kg	1	4/12/2018 11:31:04 AM	37568
Motor Oil Range Organics (MRO)	350	48		mg/Kg	1	4/12/2018 11:31:04 AM	37568
Surr: DNOP	114	70-130		%Rec	1	4/12/2018 11:31:04 AM	37568
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/12/2018 10:17:10 AM	37562
Surr: BFB	133	15-316		%Rec	1	4/12/2018 10:17:10 AM	37562
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	4/12/2018 10:17:10 AM	37562
Toluene	ND	0.047		mg/Kg	1	4/12/2018 10:17:10 AM	37562
Ethylbenzene	ND	0.047		mg/Kg	1	4/12/2018 10:17:10 AM	37562
Xylenes, Total	ND	0.094		mg/Kg	1	4/12/2018 10:17:10 AM	37562
Surr: 4-Bromofluorobenzene	90.4	80-120		%Rec	1	4/12/2018 10:17:10 AM	37562

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804628-003 **Matrix:** SOIL

Client Sample ID: TSP-7
Collection Date: 4/11/2018 12:02:00 PM
Received Date: 4/12/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/12/2018 11:16:11 AM	37569
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	160	8.8		mg/Kg	1	4/12/2018 12:15:12 PM	37568
Motor Oil Range Organics (MRO)	290	44		mg/Kg	1	4/12/2018 12:15:12 PM	37568
Surr: DNOP	114	70-130		%Rec	1	4/12/2018 12:15:12 PM	37568
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	23		mg/Kg	5	4/12/2018 10:40:34 AM	37562
Surr: BFB	102	15-316		%Rec	5	4/12/2018 10:40:34 AM	37562
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.12		mg/Kg	5	4/12/2018 10:40:34 AM	37562
Toluene	ND	0.23		mg/Kg	5	4/12/2018 10:40:34 AM	37562
Ethylbenzene	ND	0.23		mg/Kg	5	4/12/2018 10:40:34 AM	37562
Xylenes, Total	ND	0.47		mg/Kg	5	4/12/2018 10:40:34 AM	37562
Surr: 4-Bromofluorobenzene	87.6	80-120		%Rec	5	4/12/2018 10:40:34 AM	37562

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804628-004 **Matrix:** SOIL

Client Sample ID: TSP-8
Collection Date: 4/11/2018 12:06:00 PM
Received Date: 4/12/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/12/2018 11:28:36 AM	37569
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	120	9.0		mg/Kg	1	4/12/2018 12:59:25 PM	37568
Motor Oil Range Organics (MRO)	230	45		mg/Kg	1	4/12/2018 12:59:25 PM	37568
Surr: DNOP	111	70-130		%Rec	1	4/12/2018 12:59:25 PM	37568
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	21		mg/Kg	5	4/12/2018 11:04:09 AM	37562
Surr: BFB	105	15-316		%Rec	5	4/12/2018 11:04:09 AM	37562
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.11		mg/Kg	5	4/12/2018 11:04:09 AM	37562
Toluene	ND	0.21		mg/Kg	5	4/12/2018 11:04:09 AM	37562
Ethylbenzene	ND	0.21		mg/Kg	5	4/12/2018 11:04:09 AM	37562
Xylenes, Total	ND	0.43		mg/Kg	5	4/12/2018 11:04:09 AM	37562
Surr: 4-Bromofluorobenzene	85.0	80-120		%Rec	5	4/12/2018 11:04:09 AM	37562

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 037
Lab ID: 1804628-005 **Matrix:** SOIL

Client Sample ID: TSP-9
Collection Date: 4/11/2018 12:10:00 PM
Received Date: 4/12/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/12/2018 12:05:50 PM	37569
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	120	9.7		mg/Kg	1	4/12/2018 1:43:36 PM	37568
Motor Oil Range Organics (MRO)	220	49		mg/Kg	1	4/12/2018 1:43:36 PM	37568
Surr: DNOP	110	70-130		%Rec	1	4/12/2018 1:43:36 PM	37568
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	21		mg/Kg	5	4/12/2018 11:27:30 AM	37562
Surr: BFB	105	15-316		%Rec	5	4/12/2018 11:27:30 AM	37562
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.10		mg/Kg	5	4/12/2018 11:27:30 AM	37562
Toluene	ND	0.21		mg/Kg	5	4/12/2018 11:27:30 AM	37562
Ethylbenzene	ND	0.21		mg/Kg	5	4/12/2018 11:27:30 AM	37562
Xylenes, Total	ND	0.42		mg/Kg	5	4/12/2018 11:27:30 AM	37562
Surr: 4-Bromofluorobenzene	86.3	80-120		%Rec	5	4/12/2018 11:27:30 AM	37562

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 37
Lab ID: 1808219-001 **Matrix:** SOIL

Client Sample ID: TSP BG-1 (NORTH)
Collection Date: 8/2/2018 8:25:00 AM
Received Date: 8/3/2018 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/10/2018 9:42:32 PM	39721
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/6/2018 10:44:13 PM	39589
Surr: BFB	115	70-130		%Rec	1	8/6/2018 10:44:13 PM	39589
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	62	10		mg/Kg	1	8/7/2018 3:24:15 PM	39604
Motor Oil Range Organics (MRO)	150	50		mg/Kg	1	8/7/2018 3:24:15 PM	39604
Surr: DNOP	77.7	50.6-138		%Rec	1	8/7/2018 3:24:15 PM	39604
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.024		mg/Kg	1	8/6/2018 10:44:13 PM	39589
Toluene	ND	0.048		mg/Kg	1	8/6/2018 10:44:13 PM	39589
Ethylbenzene	ND	0.048		mg/Kg	1	8/6/2018 10:44:13 PM	39589
Xylenes, Total	ND	0.095		mg/Kg	1	8/6/2018 10:44:13 PM	39589
Surr: 4-Bromofluorobenzene	130	70-130		%Rec	1	8/6/2018 10:44:13 PM	39589
Surr: Toluene-d8	95.4	70-130		%Rec	1	8/6/2018 10:44:13 PM	39589

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: NEBU 37
Lab ID: 1808219-002 **Matrix:** SOIL

Client Sample ID: TSP BG-2 (SOUTH)
Collection Date: 8/2/2018 8:28:00 AM
Received Date: 8/3/2018 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/10/2018 9:54:57 PM	39721
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/6/2018 11:07:21 PM	39589
Surr: BFB	118	70-130		%Rec	1	8/6/2018 11:07:21 PM	39589
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	78	10		mg/Kg	1	8/7/2018 4:40:05 PM	39604
Motor Oil Range Organics (MRO)	220	50		mg/Kg	1	8/7/2018 4:40:05 PM	39604
Surr: DNOP	86.0	50.6-138		%Rec	1	8/7/2018 4:40:05 PM	39604
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.023		mg/Kg	1	8/6/2018 11:07:21 PM	39589
Toluene	ND	0.046		mg/Kg	1	8/6/2018 11:07:21 PM	39589
Ethylbenzene	ND	0.046		mg/Kg	1	8/6/2018 11:07:21 PM	39589
Xylenes, Total	ND	0.093		mg/Kg	1	8/6/2018 11:07:21 PM	39589
Surr: 4-Bromofluorobenzene	133	70-130	S	%Rec	1	8/6/2018 11:07:21 PM	39589
Surr: Toluene-d8	96.7	70-130		%Rec	1	8/6/2018 11:07:21 PM	39589

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

LABORATORY

CHAIN-OF-CUSTODY

RECORDS

Chain-of-Custody Record

Client: BP AMERICA

BLAGG ENGINEERING, INC.

Mailing Address:

Phone #: (505) 320-1183

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush SAME DAY

Project Name: NEBU 037

Project #:

Project Manager: STEVE MOSKAL

Sampler: JEFF BLAGG

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	~~4 oz~~ Container Type and #	Preservative Type	HEAL No.	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CHLORIDE				Air Bubbles (Y or N)
4/5/2018	1100	SOIL	BASE 5-pt @ 19'	4 oz x 1	COOL	804338-001	X		X									X				
	1107		NORTH WALL 5-pt (8'-16')			-002																
	1113		EAST WALL 5-pt (8'-16')			-003																
	1119		SOUTH WALL 5-pt (8'-16')			-004																
	1125		WEST WALL 5-pt (8'-16')			-005																

Date	Time	Relinquished by	Received by	Date	Time
4/5/2018	1255	Jeff Blagg	Christine Walters	4/5/2018	1255
	1817	Christine Walters		04/06/13	0760

Remarks: BILL BP
CONTACT: STEVE MOSKAL
WBS ELEMENT: L1-00CT-E:NEBU037

USE P.O. PROVIDED BY BP

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: BP AMERICA
BLAGG ENGINEERING INC.
Mailing Address:

Phone #: (505) 320-1183
email or Fax#:

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush SAME DAY

Project Name: NEBU 037

Project #:

Project Manager: STEVE MOSKAL

Sampler: JEFF BLAGG
On Ice: ☐ Yes ☐ No
Sample Temperature:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and # (4oz MeOH x1)	Preservative Type	HEAL No. 1804464	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CHLORIDE				Air Bubbles (Y or N)
4/9/2018	0955	SOIL	TSP-1	4 oz x1	COOL	001	X		X									X				
"	0959	"	TSP-2	"	"	002	"		"									"				
"	1004	"	TSP-3	"	"	003	"		"									"				
"	1008	"	TSP-4	"	"	004	"		"									"				

Date: 4/9/2018 Time: 1335 Relinquished by: Jeff Blagg
Received by: Christine Walker Date: 4/9/2018 Time: 1335

Date: 4/9/18 Time: 1824 Relinquished by: Christine Walker
Received by: [signature] Date: 04/10/18 Time: 0720

Remarks: Bill BP
CONTACT: STEVE MOSKAL
VID: L1-00CT-E:NEBU037

USE P.O. PROVIDED BY BP

NOTE: SAMPLES TREATED WITH H_2O_2

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: BP AMERICA
BLAGG ENGINEERING INC
Mailing Address:
Phone #: 505-320-1183
email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush SAME DAY
Project Name: NEBU 037
Project #:
Project Manager: STEVE MOSKAL
Sampler: JEFF BLAGG
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.3-4-1.6-1.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CHLORIDE				Air Bubbles (Y or N)
4/11/2018	1153	SOIL	TSP-5	4 oz x 1	COOL	1804628-001	X		X									X				
	1158		TSP-6			-002																
	1202		TSP-7			-003																
	1206		TSP-8			-004																
	1210		TSP-9			-005																

Date	Time	Relinquished by	Received by	Date	Time
4/11/2018	1540	Jeff Blagg		4/11/18	1540
4/11/18	1826			04/12/18	0815

Remarks: BILL BP
CONTACT: STEVE MOSKAL
WBS ELEMENT: L1-00CT-E:NEBU037

USE PO FROM BP

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: BP America
Blagg Engineering
Mailing Address:

Phone #: 505-320-1193
email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: NEBU 37
Project #:
Project Manager: STEVE MOSKA
Sampler: JEFF BLAGG
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.4-CF-1.0 EVM

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. * Nos 9 1808218	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CHLORIDE				Air Bubbles (Y or N)
8/2/18	0825	SOIL	TSP BG-1 (NORTH)	4 oz x 1	COOL	201	X		X									X				
"	0825	"	TSP BG-2 (SOUTH)	"	"	202	X		X									X				
	28																					
	* 08																					

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/2/18	1730	Jeff Blagg	Christy Walters	8/2/18	1730
8/2/18	1910	Christy Walters		8/03/18	0730

Remarks: BILL BP
CONTACT: STEVE MOSKA
VIA: VHIXONEVRM
WBS: L1-001CT-E:NEBU037

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

LABORATORY QUALITY ASSURANCE / QUALITY CONTROL

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804338**

09-Apr-18

Client: Blagg Engineering
Project: NEBU 037

Sample ID	**MB-37461**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**37461**		RunNo:	**50374**				
Prep Date:	**4/6/2018**	Analysis Date:	**4/6/2018**		SeqNo:	**1632980**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-37461**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**37461**		RunNo:	**50374**				
Prep Date:	**4/6/2018**	Analysis Date:	**4/6/2018**		SeqNo:	**1632981**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804338**

09-Apr-18

Client: Blagg Engineering
Project: NEBU 037

Sample ID **LCS-37459**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **37459**	RunNo: **50367**
Prep Date: **4/6/2018**	Analysis Date: **4/6/2018**	SeqNo: **1632357** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.3	70	130			
Surr: DNOP	4.5		5.000		90.7	70	130			

Sample ID **MB-37459**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **37459**	RunNo: **50367**
Prep Date: **4/6/2018**	Analysis Date: **4/6/2018**	SeqNo: **1632358** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804338**

09-Apr-18

Client: Blagg Engineering
Project: NEBU 037

Sample ID **MB-37449**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **37449**	RunNo: **50381**
Prep Date: **4/5/2018**	Analysis Date: **4/6/2018**	SeqNo: **1633401** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.59		0.5000		117	70	130			
Surr: Toluene-d8	0.42		0.5000		84.5	70	130			

Sample ID **LCS-37449**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **37449**	RunNo: **50381**
Prep Date: **4/5/2018**	Analysis Date: **4/6/2018**	SeqNo: **1634134** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	85.7	80	120			
Toluene	0.87	0.050	1.000	0	87.5	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.5	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.2	80	120			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Toluene-d8	0.42		0.5000		84.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804338**

09-Apr-18

Client: Blagg Engineering
Project: NEBU 037

Sample ID	**lcs-37449**	SampType: **LCS**			TestCode: **EPA Method 8015D Mod: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **37449**			RunNo: **50381**					
Prep Date:	**4/5/2018**	Analysis Date: **4/6/2018**			SeqNo: **1633365**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	70	130			
Surr: BFB	530		500.0		106	70	130			

Sample ID	**MB-37449**	SampType: **MBLK**			TestCode: **EPA Method 8015D Mod: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **37449**			RunNo: **50381**					
Prep Date:	**4/5/2018**	Analysis Date: **4/6/2018**			SeqNo: **1633366**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	580		500.0		116	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG | Work Order Number: 1804338 | RcptNo: 1

Received By: Anne Thorne 4/6/2018 7:00:00 AM

Completed By: Anne Thorne 4/6/2018 7:18:14 AM

Reviewed By: DAT 4.6.18 AT labeled

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804464**

11-Apr-18

Client: Blagg Engineering
Project: NEBU 037

Sample ID	**MB-37510**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**37510**	RunNo:	**50446**				
Prep Date:	**4/10/2018**	Analysis Date:	**4/10/2018**	SeqNo:	**1635906**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-37510**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**37510**	RunNo:	**50446**				
Prep Date:	**4/10/2018**	Analysis Date:	**4/10/2018**	SeqNo:	**1635907**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.6	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804464**

11-Apr-18

Client: Blagg Engineering
Project: NEBU 037

Sample ID **MB-37505**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **37505**	RunNo: **50426**
Prep Date: **4/10/2018**	Analysis Date: **4/10/2018**	SeqNo: **1634861** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.9		10.00		89.4	70	130			

Sample ID **LCS-37505**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **37505**	RunNo: **50426**
Prep Date: **4/10/2018**	Analysis Date: **4/10/2018**	SeqNo: **1635048** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.2	70	130			
Surr: DNOP	4.0		5.000		79.5	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804464**

11-Apr-18

Client: Blagg Engineering
Project: NEBU 037

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G50436**	RunNo: **50436**
Prep Date:	Analysis Date: **4/10/2018**	SeqNo: **1635716** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.0	15	316			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G50436**	RunNo: **50436**
Prep Date:	Analysis Date: **4/10/2018**	SeqNo: **1635717** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	75.9	131			
Surr: BFB	1000		1000		103	15	316			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804464**

11-Apr-18

Client: Blagg Engineering
Project: NEBU 037

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B50436**	RunNo: **50436**
Prep Date:	Analysis Date: **4/10/2018**	SeqNo: **1635749** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.86		1.000		86.5	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B50436**	RunNo: **50436**
Prep Date:	Analysis Date: **4/10/2018**	SeqNo: **1635751** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.7	77.3	128			
Toluene	0.93	0.050	1.000	0	92.7	79.2	125			
Ethylbenzene	0.92	0.050	1.000	0	92.2	80.7	127			
Xylenes, Total	2.8	0.10	3.000	0	94.0	81.6	129			
Surr: 4-Bromofluorobenzene	0.89		1.000		88.8	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1804464 RcptNo: 1

Received By: Anne Thorne 4/10/2018 7:20:00 AM

Completed By: Anne Thorne 4/10/2018 7:28:40 AM

Reviewed By: JMC 4/10/18

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804628**

13-Apr-18

Client: Blagg Engineering
Project: NEBU 037

Sample ID	**MB-37569**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**37569**	RunNo:	**50515**					
Prep Date:	**4/12/2018**	Analysis Date:	**4/12/2018**	SeqNo:	**1638842**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-37569**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**37569**	RunNo:	**50515**					
Prep Date:	**4/12/2018**	Analysis Date:	**4/12/2018**	SeqNo:	**1638843**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.4	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804628**

13-Apr-18

Client: Blagg Engineering
Project: NEBU 037

Sample ID **LCS-37536**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **37536**	RunNo: **50494**
Prep Date: **4/11/2018**	Analysis Date: **4/12/2018**	SeqNo: **1637376** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		83.5	70	130			

Sample ID **MB-37536**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **37536**	RunNo: **50494**
Prep Date: **4/11/2018**	Analysis Date: **4/12/2018**	SeqNo: **1637377** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.4		10.00		94.1	70	130			

Sample ID **LCS-37568**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **37568**	RunNo: **50494**
Prep Date: **4/12/2018**	Analysis Date: **4/12/2018**	SeqNo: **1637385** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.2	70	130			
Surr: DNOP	4.2		5.000		85.0	70	130			

Sample ID **MB-37568**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **37568**	RunNo: **50494**
Prep Date: **4/12/2018**	Analysis Date: **4/12/2018**	SeqNo: **1637386** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.3		10.00		93.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804628**

13-Apr-18

Client: Blagg Engineering
Project: NEBU 037

Sample ID **MB-37562**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **37562**	RunNo: **50508**
Prep Date: **4/11/2018**	Analysis Date: **4/12/2018**	SeqNo: **1638726** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		95.1	15	316			

Sample ID **LCS-37562**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **37562**	RunNo: **50508**
Prep Date: **4/11/2018**	Analysis Date: **4/12/2018**	SeqNo: **1638727** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	115	75.9	131			
Surr: BFB	1100		1000		111	15	316			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804628**

13-Apr-18

Client: Blagg Engineering
Project: NEBU 037

Sample ID **MB-37562**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **37562**	RunNo: **50508**
Prep Date: **4/11/2018**	Analysis Date: **4/12/2018**	SeqNo: **1638765** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		87.5	80	120			

Sample ID **LCS-37562**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **37562**	RunNo: **50508**
Prep Date: **4/11/2018**	Analysis Date: **4/12/2018**	SeqNo: **1638766** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.0	77.3	128			
Toluene	0.90	0.050	1.000	0	89.7	79.2	125			
Ethylbenzene	0.89	0.050	1.000	0	89.2	80.7	127			
Xylenes, Total	2.7	0.10	3.000	0	91.2	81.6	129			
Surr: 4-Bromofluorobenzene	0.91		1.000		90.8	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG | Work Order Number: 1804628 | RcptNo: 1

Received By: Anne Thorne 4/12/2018 8:15:00 AM

Completed By: Anne Thorne 4/12/2018 8:25:23 AM

Reviewed By: JMD 4/12/18

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808219**

15-Aug-18

Client: Blagg Engineering
Project: NEBU 37

Sample ID	**MB-39721**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**39721**		RunNo:	**53375**				
Prep Date:	**8/10/2018**	Analysis Date:	**8/10/2018**		SeqNo:	**1757740**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-39721**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**39721**		RunNo:	**53375**				
Prep Date:	**8/10/2018**	Analysis Date:	**8/10/2018**		SeqNo:	**1757741**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.9	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808219**

15-Aug-18

Client: Blagg Engineering
Project: NEBU 37

Sample ID **MB-39604**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **39604**	RunNo: **53261**
Prep Date: **8/6/2018**	Analysis Date: **8/7/2018**	SeqNo: **1753037** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		87.2	50.6	138			

Sample ID **LCS-39604**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **39604**	RunNo: **53261**
Prep Date: **8/6/2018**	Analysis Date: **8/7/2018**	SeqNo: **1753038** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.6	70	130			
Surr: DNOP	4.2		5.000		84.0	50.6	138			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808219**

15-Aug-18

Client: Blagg Engineering
Project: NEBU 37

Sample ID	lcs-39589	SampType:	LCS4		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	BatchQC	Batch ID:	39589		RunNo:	53243				
Prep Date:	8/3/2018	Analysis Date:	8/6/2018		SeqNo:	1752198	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.8	80	120			
Toluene	0.95	0.050	1.000	0	95.5	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	0.56		0.5000		111	70	130			
Surr: Toluene-d8	0.45		0.5000		89.4	70	130			

Sample ID	mb-39589	SampType:	MBLK		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	PBS	Batch ID:	39589		RunNo:	53243				
Prep Date:	8/3/2018	Analysis Date:	8/6/2018		SeqNo:	1752199	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.63		0.5000		125	70	130			
Surr: Toluene-d8	0.47		0.5000		94.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808219**

15-Aug-18

Client: Blagg Engineering

Project: NEBU 37

Sample ID **lcs-39589**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **39589**	RunNo: **53243**
Prep Date: **8/3/2018**	Analysis Date: **8/6/2018**	SeqNo: **1752062** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	110	70	130			
Surr: BFB	530		500.0		106	70	130			

Sample ID **mb-39589**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **39589**	RunNo: **53243**
Prep Date: **8/3/2018**	Analysis Date: **8/6/2018**	SeqNo: **1752063** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	560		500.0		112	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1808219 RcptNo: 1

Received By: Anne Thorne 8/3/2018 7:30:00 AM Anne Thorne

Completed By: Anne Thorne 8/3/2018 1:27:20 PM Anne Thorne

Reviewed By: JO 08/03/18

Labeled by: AT 08/03/18

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Yes			